Application No. 09/981,320   13   Docket No.: M1103.70778US00
Amendment dated September 2, 2009
Reply to Office Action of June 2, 2009

REMARKS

In response to the Office Action mailed June 2, 2009, Applicant respectfully requests reconsideration. Claims 1, 3, 6-10, 13-21, 24, 26-27, 31-39, 44, 46, 57, 59-60, 62, 65 and 71-77 were previously pending in this application. By this amendment, Applicant is canceling claims 26 and 33-39 without prejudice or disclaimer. Claims 1, 20, 24, 27, 44, 57, 62 and 65 have been amended. New claims 78 and 79 have been added. As a result, claims 1, 3, 6-10, 13-21, 24, 27, 31, 32, 44, 46, 57, 59-60, 62, 65 and 71-77 are pending for examination with claims 1, 20, 24, 27, 44, 57, 62 and 65 being independent claims. No new matter has been added.

Claim Rejections Under 35 U.S.C. §103

Each of the currently pending independent claims is rejected under 35 U.S.C. §103 based on McCann and Theimer. Applicants respectfully traverse the rejection to the extent it is maintained over the claims as amended.

In rejecting claim 1, the Examiner cites to column 2, lines 32-34 of McCann as demonstrating that McCann determines cognitive availability of a user. However, the cited passage describes that different information is presented to the user through a graphical user interface as the user performs different tasks. In contrast, claim 1 recites "dynamically determining an appropriate user interface...for presentation of information associated with a task" and "presenting to the user information associated with the task, the presenting using the selected predefined interface." Thus, McCan, in describing different interfaces for different tasks, is not describing selection of an interface for a task and does not meet the limitations of the claim it asserted to teach.

As a further distinguishing feature, the claim further recites "automatically selecting, without user intervention, one of a predefined user interfaces." The dynamically selecting comprises "determining a quantity of information the user has cognitive availability to receive in a background mode and selecting a user interface including an amount of background information that is less than the user has the availability to receive." McCann provides no teaching on "determining a quantity of information the user has cognitive availability to receive in a background mode..." As described, for example on pages 124 and 125 of the present

application, determining cognitive availability may entail determining the number of types of feedback or status that the user can perceive and the system may select a user interface accordingly. As a specific example, if the user has enough background awareness available to receive one type of feedback, the system might present a single light in the peripheral vision of the user. In contrast, when the user has more background awareness, the system might present a combination of light and sound or a combination of light, sound and pressure on the skin of the user to convey information. McCann provides no teaching relating to the claimed limitation.

Theimer is not cited to cure these deficiencies of McCann. Accordingly, even if the references were combined, the combination would not meet at least the highlighted limitations of claim 1, and the rejection should be withdrawn.

The Office Action rejects independent claim 20, citing the same passages of McCann that are cited in connection with claim 1. For reasons that should be apparent from the discussion of the references in conjunction with claim 1, even if the references were combined, the combination would not meet all limitations of claim 20. For example, the combination would not meet the limitation of: "the dynamically selecting comprising determining a quantity of information the user has cognitive availability to receive in a background mode and selecting a user interface including an amount of background information that is less than the user has the availability to receive." Thus, the rejection of claim 20 should be withdrawn.

The Office Action also rejects independent claim 24 based on the same passages of McCann. Claim 24 recites "…determining…a cognitive availability of the user that is a function of an amount of time the user has between focus tasks." The claim further recites "the complexity of the selected interface being based on the amount of time determined by the second component that the user has between focus task." As described in the present application, for example at pages 125-127, a system may determine a time between focus tasks, which may be used in the selecting a user interface. For reasons that should be apparent from the discussion of McCann above, the references, even if combined, would not meet at least this limitation of claim 24, and the rejection should be withdrawn.

The Office Action also rejects independent claim 27 based on the same passages of McCann. Claim 27 recites "dynamically determining cognitive availability of the user, the

cognitive availability is a function of an indication of a number of types background feedback for

which the user has available attention or a time between focus task during which the user has

available attention or a number of routine tasks for each the user has available attention." For

reasons that should be apparent from the discussion of McCann above, McCann does not

dynamically determine cognitive availability of the user and therefore does not dynamically

determine cognitive availability as a function of the parameters recited in claim 27.

Further, claim 27 recites "determining multiple user interface elements that are available

for presentation on the computing device" and then "generating a first user interface for

presentation to the user by combining a plurality of the user interface elements determined to be

available for presentation on the computing device." McCann describes an interface that

provides a "solider with information specifically tailored for the combat task at hand." (Column

2, lines 33-34). These interfaces are understood to be preconfigured. Accordingly, McCann

does not meet limitations of claim 27 for generating by combining, and the rejection should be

withdrawn.

Independent claim 44 is also rejected based on the same combination of references.

However, claim 44 recites "dynamically determining, without user intervention, at least one

value representative of one or more characteristics of a user interface..." The claim further

recites "dynamically determining at least one value representative of cognitive availability of the

user." The claim then recites "determining a user interface that satisfies the determined

requirements based in part on a comparison of the at least one value representative of one or

more current characteristics of a user interface and the at least one value representative of

cognitive availability of the user." As described in the present application, such as for example

at page 259, comparisons of numeric values may be used to select an appropriate user interface.

No such selection is described in McCann. Thus, for at least this reason, the rejection should be

withdrawn.

Independent claim 57 is also rejected based on the same combination of references.

However, claim 57 recites "dynamically determining a level of attention which the user can

currently give to the user interface based in part on the cognitive availability of the user, the

cognitive availability represents the user's background awareness, task switched attention and

parallel attention." For reasons that should be apparent from the discussion of McCann above, McCann does not dynamically determine a level of attention meeting the limitations of claim 57. Thus, the rejection should be withdrawn.

Independent claim 62 is also rejected based on the same combination of references. However, claim 62 recites "dynamically determining cognitive load of the user, the cognitive load includes a cognitive availability of the user that is a function of at least background awareness of the user." The claim further recites "selecting one of the retrieved definitions,…the selected retrieved definition having a number of background elements selected based on the determined background awareness of the user." For reasons that should be apparent from the discussion of McCann above, the reference does not describe generating a user interface based on a selected definition as recited in claim 62. Accordingly, the rejection should be withdrawn.

Independent claim 65 is similarly rejected based on the same combination of references. However, claim 65 recites "dynamically determining cognitive availability of the user, the cognitive availability is a function of at least the task switched attention of the user." The claim further recites "the selected retrieved definition being selected based at least on the determined task switched attention of the user." For reasons that should be apparent from the discussion of the McCann above, the references, even if combined do not meet at least these limitations of claim 65. This rejection should also be withdrawn.

General Comments On Dependent Claims

Each of the dependent claims depends from a base claim that is believed to be in condition for allowance, and Applicants believe that it is unnecessary at this time to argue the allowability of each of the dependent claims individually. Applicants do not, however, necessarily concur with the interpretation of the dependent claims as set forth in the Office Action, nor do Applicants concur that the basis for the rejection of any of the dependent claims is proper. Therefore, Applicants reserve the right to specifically address the patentability of the dependent claims in the future, if deemed necessary.

<u>New Claims 78 and 79</u>

New claims 78 and 79 depend from claim 1 and should be allowed at least based on their dependency. Additionally, claims 78 and 79 recite limitations that further distinguish the cited references. For example, claim 78 recites based on the determined cognitive availability "presenting one visual indicator in peripheral vision of the user." Claim 79 recites, also based on determined cognitive availability, "presenting one visual indicator in peripheral vision of the user and presenting an audible indicator." Embodiments corresponding to these claims are described in the present application, for example at page 125, but are not mentioned in the references. Accordingly, new claims 78 and 79 patentably distinguish over the references and should be allowed.
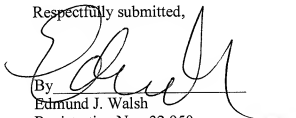
CONCLUSION

If it is determined that a telephone conference would expedite the prosecution of this application, the Examiner is invited to telephone the undersigned at the number given below.

In the event the U.S. Patent and Trademark Office determines that an extension is required, applicant petitions for any required relief including extensions of time and authorizes the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to Deposit Account No. 23/2825 referencing docket no. M1103.70778US00.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 23/2825 under Docket No. M1103.70778US00 from which the undersigned is authorized to draw.

Dated: September 2, 2009   Respectfully submitted,

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